A NOTE ON THE LIFE-CYCLE OF TETRAOPES FEMORATUS LECONTE (CERAMBYCIDÆ)¹

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While making a study of the bionomics of the common milkwood beetle, Tetraopes tetrophthalmus (Forst.), during the summer of 1940 at Urbana Illinois, I found, on August 11, a fully developed Tetraopes larva tunneling through the center of the horizontal root of the common milkweed. Asclepias suriaca. This larva was identified at the United States National Museum as being different from those thought to be T. tetrophthalmus. Unfortunately the species could not be determined since investigators had never associated larvæ similar to this one with an adult beetle. Since tetrophthalmus and femoratus were the only species of Tetraopes seen during my observations I believe that this single specimen was a representative of femoratus. The size of the individual would also warrant this conclusion since the adult of femoratus is the largest species of Tetraopes found in the state. This specimen was 23 mm. in length. Larvæ of T. tetrophthalmus, which were found during the fall of 1939, ranged from 13 to 19 mm, in length.

The first adult of *T. femoratus* was seen on July 23. It seemed highly improbable that eggs could have been deposited and the larvæ from these eggs could have reached a fully developed condition within a period of twenty days or even a month, assuming that the adults were present earlier. These facts, therefore, seem to indicate that at least some individuals of this species may spend two or more years in the larval condition about the roots of milkweed. Since the roots of these plants are perennial the larvæ would have a

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continuous food supply to make a two-year developmental period possible. If the larval stage does actually last more than twelve months it should be possible to find larve at any time during the year. Although it may be a possibility to find these larvæ at any time the probability is very small, at least in the vicinity of Urbana, Illinois, which is very near the eastern limit of the range of this insect. Only 38 adults of T. femoratus were seen during the summer. A conservative estimate of the number of adults of T. tetrophthalmus seen during this period would be 8,000. An average of one plant out of three was found to be infested by this latter species. It can, therefore, be shown mathematically that there would be one chance in approximately 630 of finding a plant infested with T. femoratus. This again would be a conservative figure. The duration of the larval stage of any one individual is not known, however, it seems probable that it would be at least 23 months.